312 805 hours, that is the twelfth part of an addina. During the equinox, the local day hour is equal to the local night hour and corresponds to a 60 minute flow of water. In winter, however, the local hour is equivalent to more than three and one-half night hours and to less than two and one-half day hours.

In Damascus Ghouta water distribution is particularly complicated.

Water Policy

312 A very strict discipline generally rules water diversions for gardens. The communities elect a "water master," generally the mowkhar who has administrative functions in the village and who is assisted by water guards called chaouia. These latter supervise the draining system, control the barrages and make certain that no owner abuses his water rights.

Among Different Villages

312 621 Such distribution is accomplished in numerous ways. Occasionally each village uses the water according to its own wishes without considering the damage possibly caused to the villages downstream. Such is the case with the water of the El-dwadj (Wadi el-Ajam) near Damascus. Here an enormous amount of water is lost to the villages downstream because of the intense evaporation in summer and the infiltrations into the basaltic regions upstream. The same thing occurs in the villages of Khasrajié and Makrousse.

In other cases, custom assigns the whole or part of the water to each village during a certain period only. In such cases a rotation period is set up between the villages similar to that within the communities. Thus, the water of the Mnin is assigned for four days to Mnin, six days to Tell, one day to Kourné and four days to Barzé.

Modern Water Distribution

312 804 Water is distributed with mathematical precisioness only in those regions which are being irrigated according to modern irrigation plans. Territories thus irrigated with the water of the Orontes are those in the communities north of Homs such as Douzir, Deir Bialbé, etc.

Since water supplies are precisely known and are constant throughout the year due to the regulating barrage of Homs Lake, it is possible to calculate exactly the quantity of water each hectare shall receive. This quantity is established at 0 liters 20 seconds per hectare. 312 804

The total rotation period consists of seven days, and each hectare of irrigated land receives every week about 01.20 x 60 x 60 x 24 x 7 or 121 m^3. More detailed sub-divisions are foreseen. The irrigation service determines the duration of the water turns. The official time is that shown by the town hall clock of Homs. This system, however, is complex and needs a qualified staff of engineers, controllers and canal guards. It is still the exception in Syria.

Water Rights in Palmyra

The district of Palmyra receives its water from deep thermal and surface springs. The water is transported by underground canals (foggaras) which have existed since Roman times and which are necessary to prevent evaporation due to the dryness of the air at Palmyra. They vary from two to six kilometers in length. 312

Water Distribution

This is on a time basis, rotation turns depending on the supply, the number of gardens which are to be watered and the number of persons entitled to water. In Palmyra the turns vary from 12 days in the summer to 18 days in the winter. 312 805

Water Rights

These may be sold. The origin of the water titles is lost in history due to the antiquity of the hydraulic works. 312 423

Since there was no effective government during the last century, water became the property of third parties independently of land ownership. Toward the end of the century the government received no taxes from Palmyra and ceded the main thermal spring to a certain El-Hissuan of the Sued family who lived at Homs and to whom persons drawing water paid 80 piasters per hour of watering. For a long time, water rights were the only type of communal property and